

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference JK 11977 WO	FOR FURTHER ACTION	See item 4 below
International application No. PCT/SE2005/000244	International filing date (<i>day/month/year</i>) 22 February 2005 (22.02.2005)	Priority date (<i>day/month/year</i>) 24 February 2004 (24.02.2004)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant SANDVIK INTELLECTUAL PROPERTY AB		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).
2. This REPORT consists of a total of 5 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

- | | | |
|-------------------------------------|--------------|---|
| <input checked="" type="checkbox"/> | Box No. I | Basis of the report |
| <input type="checkbox"/> | Box No. II | Priority |
| <input type="checkbox"/> | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> | Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> | Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> | Box No. VI | Certain documents cited |
| <input type="checkbox"/> | Box No. VII | Certain defects in the international application |
| <input type="checkbox"/> | Box No. VIII | Certain observations on the international application |

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Date of issuance of this report 29 August 2006 (29.08.2006) Authorized officer <p style="text-align: center; font-weight: bold;">Philippe Becamel</p> e-mail: pt12@wipo.int
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PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

REC'D 31 MAY 2005

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To:

Sandvik AB Intellectual
Property
811 81 SANDVIKEN
SVERIGE

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing
(day/month/year)

25-05-2005

Applicant's or agent's file reference

JK 11977 WO

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/SE2005/000244

International filing date (day/month/year)

22.02.2005

Priority date (day/month/year)

24.02.2004

International Patent Classification (IPC) or both national classification and IPC

B23C 5/20 // B23B 27/16

Applicant

Sandvik AB et al

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further opinions, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/SE

Patent- och registreringsverket

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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/SE2005/000244

Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This opinion has been established on the basis of a translation from the original language into the following language, _____, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

☐ a sequence listing

☐ table(s) related to the sequence listing

b. format of material

☐ in written format

☐ in computer readable form

c. time of filing/furnishing

☐ contained in the international application as filed.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/SE2005/000244

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-8	YES
	Claims		NO
Inventive step (IS)	Claims	1-7	YES
	Claims	8	NO
Industrial applicability (IA)	Claims	1-8	YES
	Claims		NO

2. Citations and explanations:

The following documents were cited as particularly relevant:

D1: WO 02055245 A1

D2: US 5931613 A1

The invention relates to a cutting tool with connecting surfaces of serration type between the basic body and the cutting insert. The primary object of the invention is to provide a cutting tool that guarantees an even and reliable distribution of the cutting forces acting on the cutting insert.

Document D1 represents closest background art.

Claim 1

Document D1 reveals an indexable insert (fig. 6) for a cutting tool having a serrated connecting surface with a plurality of mutually parallel ridges. The ridges are divided in two sets on the connecting surface.

The invention differs from the document in that the insert according to invention has one or several transverse ridges. The difference solves the problem of achieving a more even distribution of the cutting forces.

The person skilled in the art faces the problem of providing a cutting insert with improved properties regarding securing of the insert and distribution of forces acting on the insert.

In document D2 a cutting insert is revealed which is intended to in an optimal way carry axial and radial forces.

.../...

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/SE2005/000244

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: BOX V

The insert (fig. 6) is provided with two parallel ridges (6) with a groove (3) and a transverse ridge (4).

For a person skilled in the art it seems to be an obvious solution to, in background to what is revealed in D2, provide the cutting insert in D1 with a transverse ridge passing through the serrated areas.

Therefore, the claim lacks inventive step.

According to the arguments stated above, the invention according to claim 1-8 is novel. Claims 1-7 are considered to involve an inventive step while claim 8 lacks inventive step. The invention according to claims 1-8 is considered to be industrially applicable.